

(1) a side wall having an upper portion and a lower portion, the upper portion being located in the upper cyclonic region, and the lower portion extending to a point above the cyclone floor; and

(2) at least one downcomer port located proximate to the lower portion end of the downcomer, the port defining an opening in downcomer for introduction of liquid above the floor into the contacting volume;

(e) a plurality of liquid outlets located on the continuous side wall;

(f) at least two sets of spin vanes located between the continuous side wall and the downcomer side wall, the first of the sets being positioned above the contacting volume and each succeeding set being positioned at a distance spaced above the previous set.

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cont.*

15. The device of claim 14 including liquid caps at the upper end of the cyclonic region.

16. The device of claim 15 including packing material in the contacting volume to promote contacting of vapor and liquid.

REMARKS

Applicants have amended the specification to correct obvious errors and promote clarity. These amendments obviate the Examiner's objections to the specification.

Applicants have amended the claims, rewriting them as new claims 11 to 16. Support for the newly drafted claims can be found throughout the specification and drawings. Indeed claims 11 to 13 read on Figures 2 and 3 while claims 14 to 16 read on

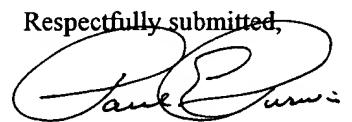
Figures 4 and 5. These claims are deemed to overcome the Examiner's rejection of claims 1 to 3 and 5 to 9 under 35 U.S.C. § 112. Also, these new claims overcome the Examiner's objection under 37 CFR 1.83(a) to the drawings.

The Examiner rejected claims 1 to 3 and 5 to 9 under 35 U.S.C. § 102(e) as anticipated by Sheinman. Applicants respectfully request the Examiner to withdraw that rejection. Clearly, Sheinman's vanes are not located at the mid-point of his device (as required by Applicants' claim 11, nor does Sheinman have vanes above each other as required by Applicants' claim 14. Moreover, Applicants' location of the vanes is nowhere disclosed or suggested by Sherman.

Applicants note that the cancellation of claim 6 renders the rejection of that claim moot.

Regarding the objection to declaration Applicants respectfully request continued prosecution of the application with the existing declaration and upon notice of allowance Applicants will submit a corrected declaration.

Respectfully submitted,



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Pursuant to 37 CFR 1.34(a)

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